



Diagnostic/Remote Monitoring by Email
Inventor: John Dung-Quang Ly
Application No.: 09/520,687

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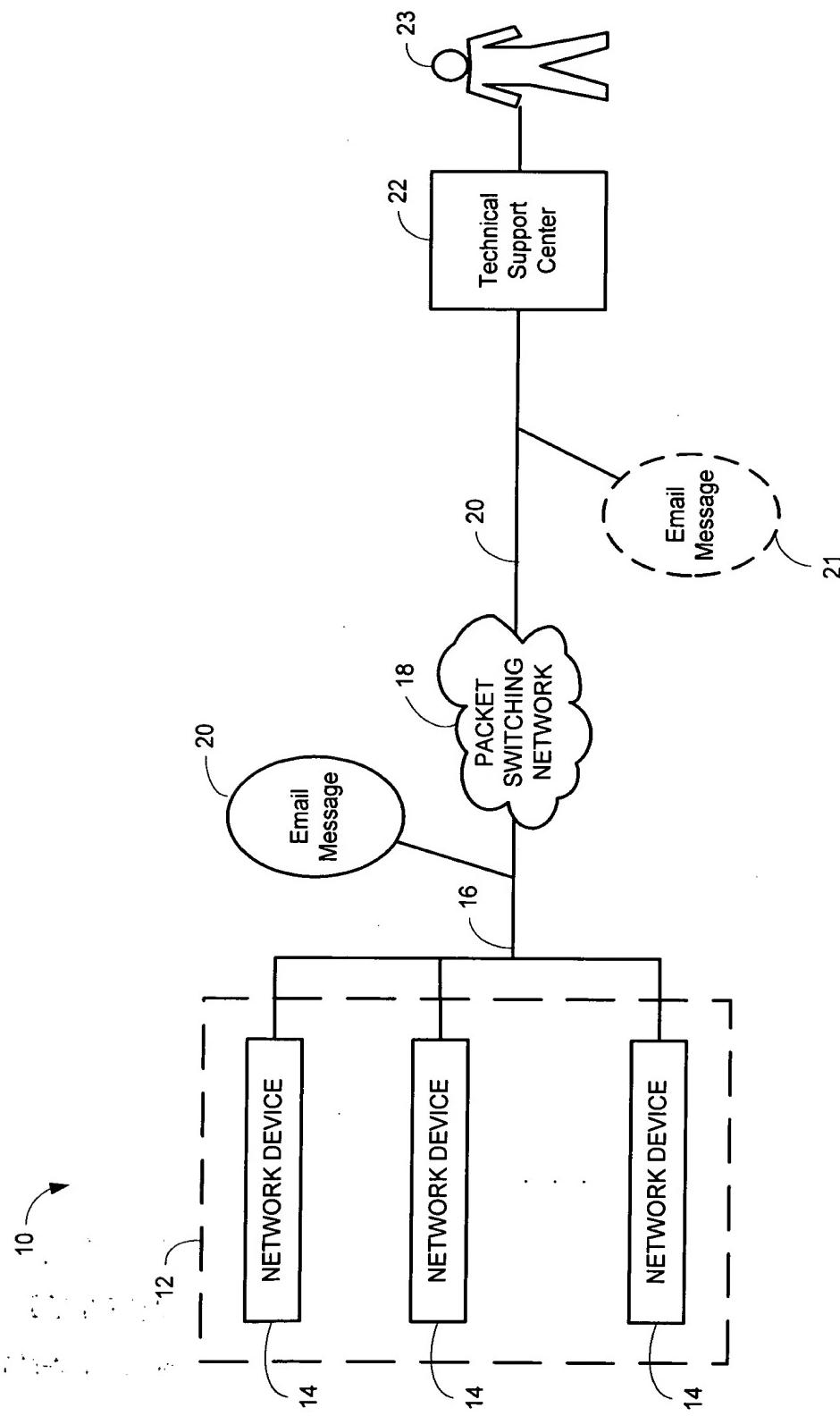
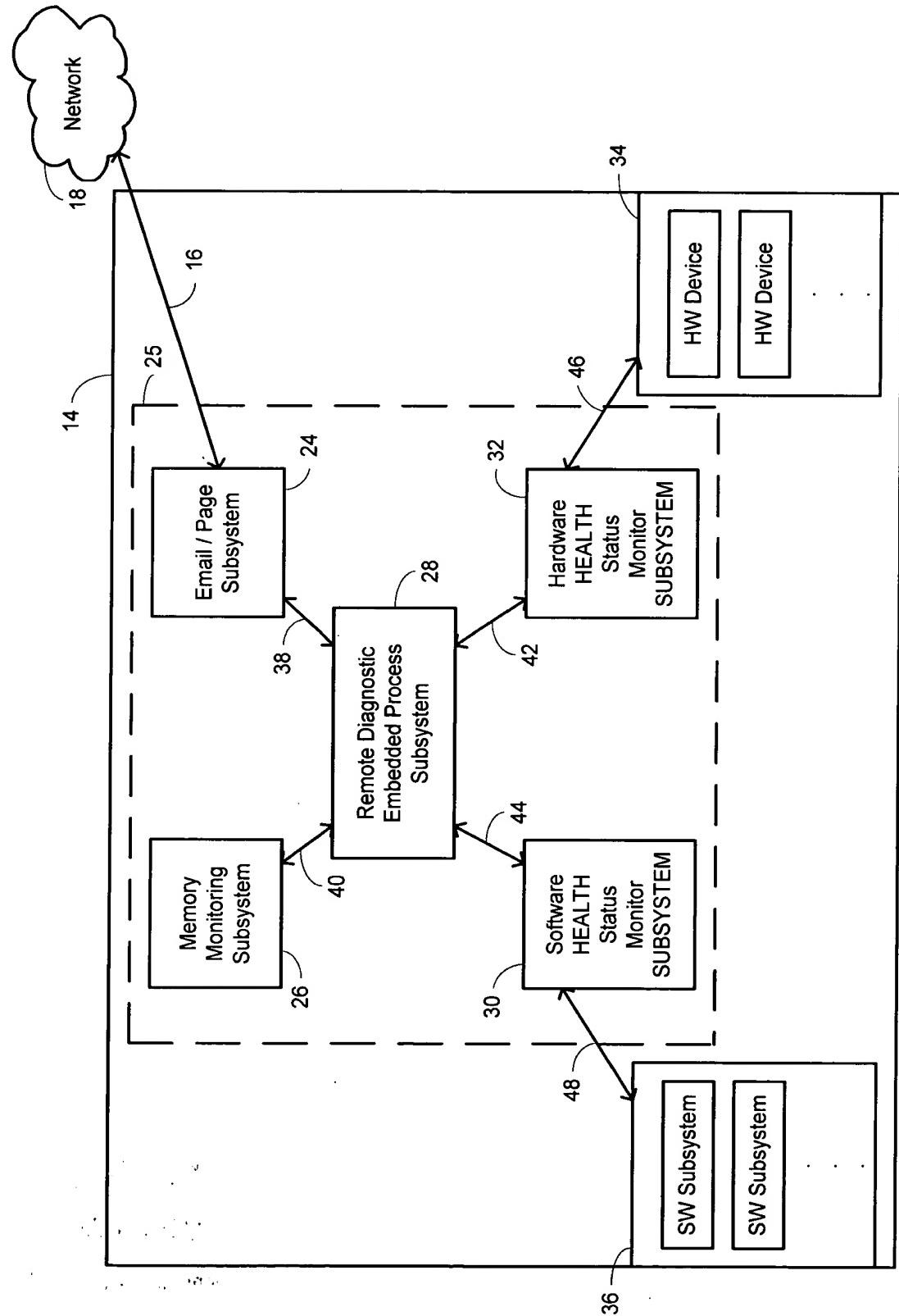


FIG. 1



F/G. 2



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Central Process Software Architecture

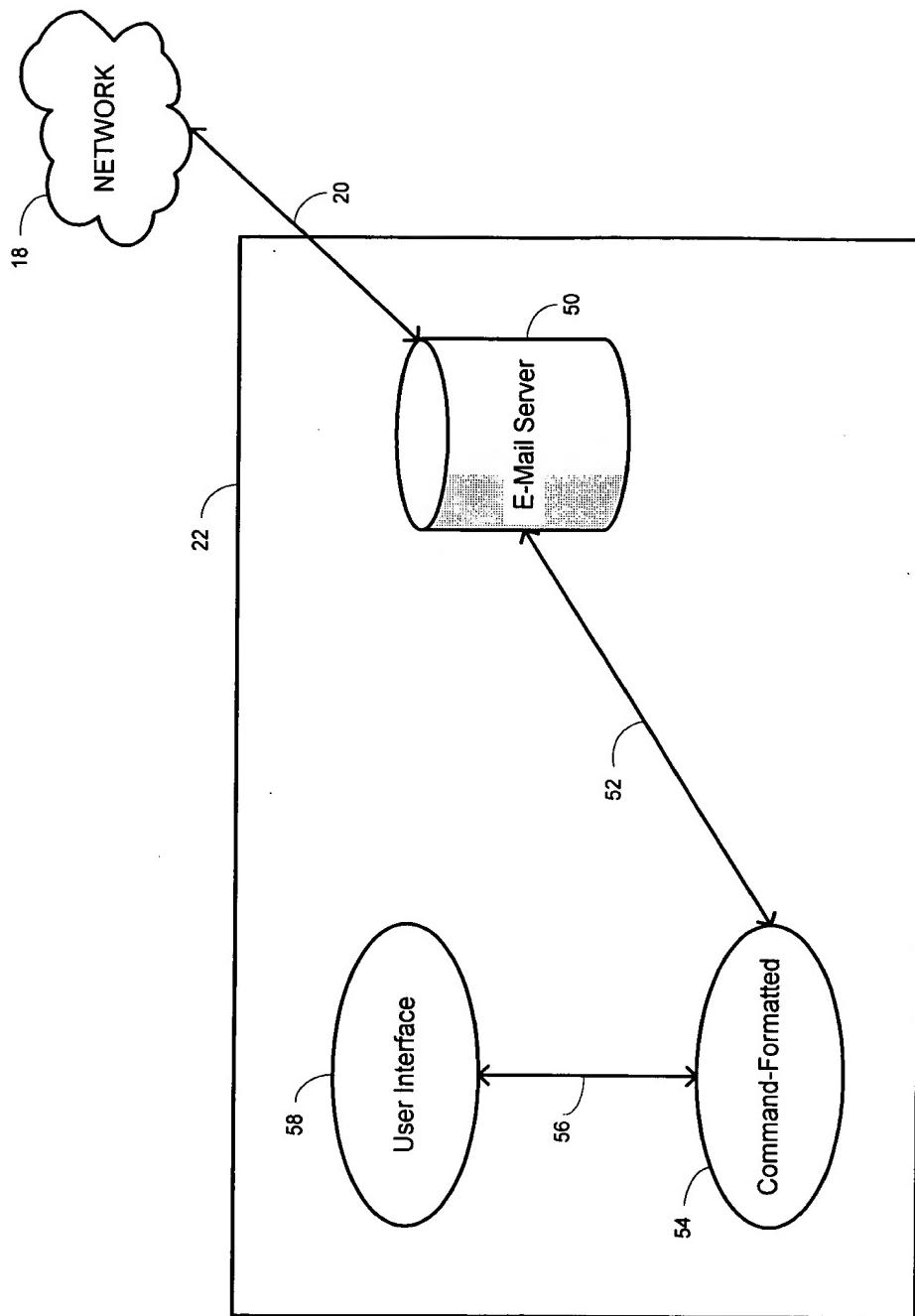


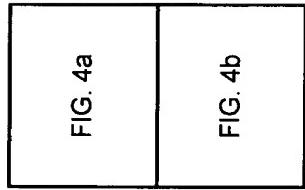
FIG. 3



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Key To
FIG. 4



<pre> 1 Bug CSCdp64343 2 CSC.sys all 3 rommon 7 > stack 4 Kernel Level Stack Trace: Initial SP = 0x616cb48, Initial PC = 0x602dce94, RA = 0x602c92e4 5 Frame 0 : FP= 0x616cb48, PC= 0x602dce94, 0 bytes 6 Frame 1 : FP= 0x616cb48, PC= 0x602c92e4, 24 bytes 7 Frame 2 : FP= 0x616cb60, PC= 0x602d8f68, 40 bytes 8 Frame 3 : FP= 0x616cb88, PC= 0x602d91b8, 200 bytes 9 Frame 4 : FP= 0x616cb50, PC= 0x602d8778, 40 bytes 10 Frame 5 : FP= 0x616bbe78, PC= 0x602b68c0, 168 bytes 11 Frame 6 : FP= 0x616cbf20, PC= 0x602b5aec, 32 bytes 12 Frame 7 : FP= 0x616cbf40, PC= 0x602db848, 88 bytes 13 14 Process Level Stack Trace: Initial SP = 0x630fac40, Initial PC = 0x603f6080, RA = 0x603f608c 15 Frame 0 : FP= 0x630fac40, PC= 0x603f6080, 56 bytes 16 Frame 1 : FP= 0x630fac78, PC= 0x603f068c, 72 bytes 17 Frame 2 : FP= 0x630fac00, PC= 0x602b39e4, 24 bytes 18 Frame 3 : FP= 0x630fac08, PC= 0x602b39d0, 24 bytes 19 </pre>	<pre> Enclosure 4 of 10 Added 000107 by hanif 61 t6 : 00000000 01000000 s8 : 00000000 00000000 62 t7 : 01000100 0000000f ra : 00000000 603f608c 63 Hi : 00000000 00000000 LO : 00000000 00000000 64 EPC : 00000000 603g6080 ErrPC : 00000000 602dc060 65 Stat : 3400ff03 Cause : 01000010 66 Interrupt Control Register : 10001f82 67 rommon 9 > 68 hanif@life:NONE:symbols[84] rsym c5400.js-mz.symbols.Jan7 69 Reading c5400.js-mz.symbols.Jan7 70 c5400.js-mz.symbols..Jan7 read in 71 Enter hex value: 603F068C 602B39E4 602B39D0 72 0x603F0680:cdp_cache_aggr0x603f602c)+0x54 73 0x603F068C:cdp_prot0x603f03f4)+0x298 74 0x602B39E4:14k_processes_dispatch(0x602b39d0)0x14 75 0x602B39D0:14k_processes_dispatch(0x602b39d0)+0x0 76 Enter hex value: 77 Enter hex value: 78 Enter hex value: 79 Enter hex value: 0x602dce94 </pre>
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FIG. 4a



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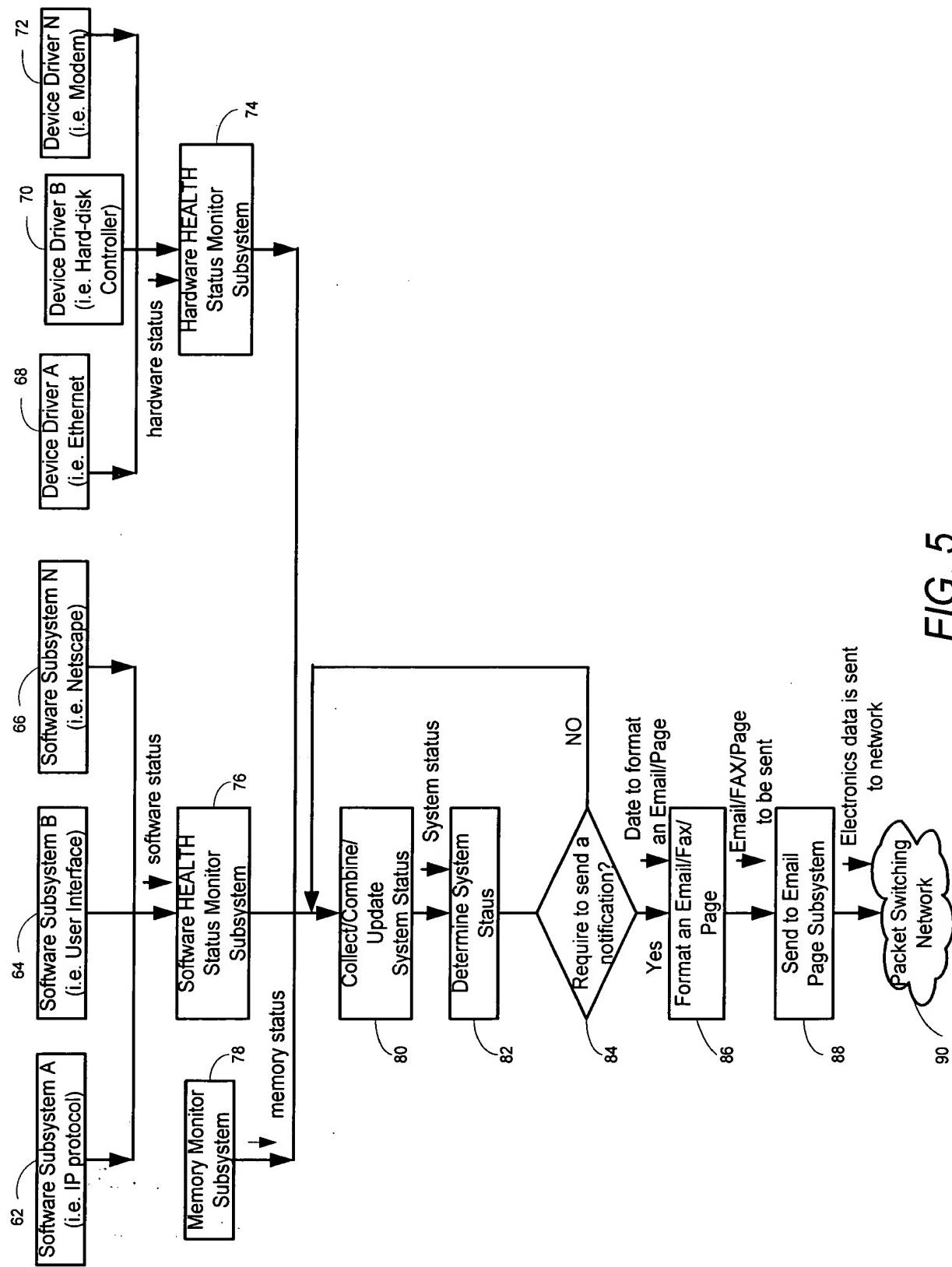
Reg	MSW	LSW	Reg	MSW	LSW
20 rommon 8 > context			80 0x602dce94 : emt_call (0x602dce90) +0x4		
21 Kernel Level Context:			81 Enter hex value: 0x602dce94		
22 Reg	MSW	LSW	82 0x602dce94: emt_call (0x602dce90) +0x4		
23			83 Enter hex value: 0x602c92e4		
24 zero	: 00000000	00000000	84 0x602c92e4 : mon_cpu_exception(0x602c92c0)+0x24		
25 AT	: 00000000	61730000	85 Enter hex value: 0x602d8ff8		
26 v0	: 00000000	0000000a	86 0x602d8fd8: 14k_return_to_monitor_direct(0x602d8f60)+0x78		
27 v1	: 00000000	00000010	87 Enter hex value: 0x602d91b8		
28 a0	: 00000000	0000002b	88 0x602d91b8: 14k_return_to_monitor(0x602d9010)+0x1a8		
29 a1	: 00000000	000000a0	89 Enter hex value: 0x602d8778		
30 a2	: 00000000	00000010	90 0x602d8778:handle_exception (0x602d84d0)+0x328		
31 a3	: 00000000	618dd470	91 Enter hex value: 0x602b68c0		
32 t0	: 00000000	00000038	92 0x602b68c0: special_default (0x602b66a4) +0x21c		
33 t1	: 00000000	34000001	93 Enter hex value: 0x602b5aec		
34 t2	: 00000000	10001082	94 0x602b5aec:r4k_signal_handler(0x602b59a8) + 0x144		
35 t3	: ffffffff	ffff00ff	95 Enter hex value: 0x602db848		
36 t4	: 00000000	00001000	96 0x602db848: 14k_sig_dispatch_return(0x602db848) +0x0		
37 t5	: 00000000	0000001c	97 Enter hex value: 0x603f6080		
38 t6	: ffffffff	fffffcff	98 0x603f6080: cdp_cache_aggr(0x603f602c) +0x54		
39 t7	: 00000000	00000002	99 Enter hex value: 0x603f608c,		
40 HI	: 00000000	00000006	100 0x603f608c, :cdp_prot (0x603f63f4) +0x298		
41 EPC	: 00000000	602dce94	101 Enter hex value: 0x602b39e4		
42 Stat	: 34000002		102 0x602b39e4 : r4k_process_dispatch (0x602b39d0) +0x14		
43 Interrupt Control Register			103 Enter hex value: 0x602b39d0		
44 Process Level Context:			104 0x602b39d0 : r4k_process_dispatch (0x602b39d0) +0x0		
45 Reg	MSW	LSW	105 Enter hex value:		
46					
47 zero	: 00000000	00000000			
48 AT	: 00000000	618e0000			
49 v0	: 00000000	00000000			
50 v1	: 00000000	0be6d67d			
51 a0	: 00000000	00000000			
52 a1	: 00000000	01263690			
53 a2	: 00000000	00000000			
54 a3	: 00000000	00000000			
55 t0	: 00000000	00000000			
56 t1	: 00000000	00000033			
57 t2	: 00000000	00000001			
58 t3	: ffffffff	ffff00ff			
59 t4	: 00000000	00001f00			
60 t5	: 00000000	00000f36d			

F/G. 4b



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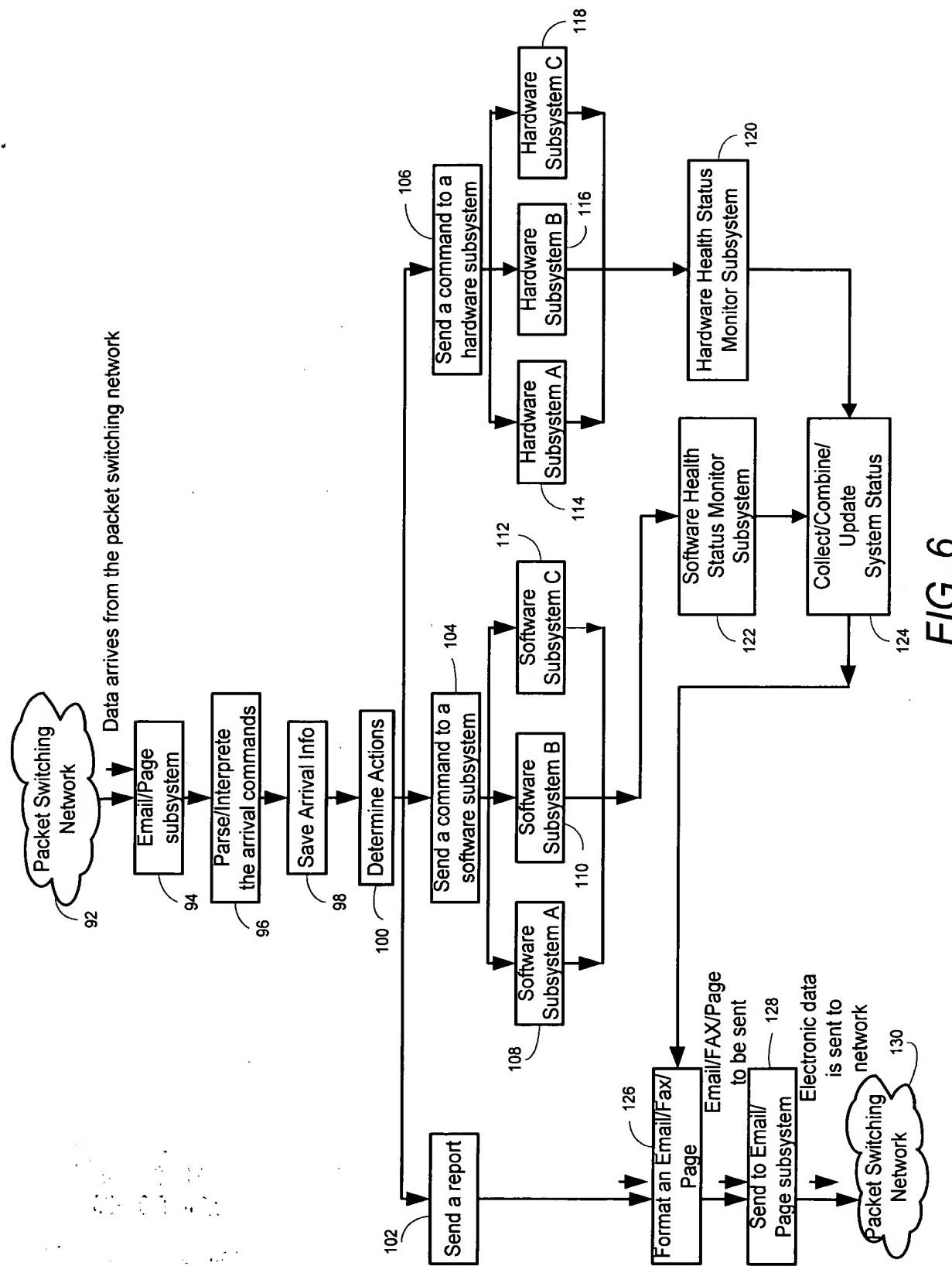
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F/G. 5



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F/G. 6